

A photograph of a large commercial airplane on a snowy tarmac. Two ground support vehicles, marked with the number 11 and 10, are positioned on either side of the aircraft. The scene is heavily overcast and snowy, with a second aircraft visible in the background.

National Weather Service

Cleveland 2010 Calendar



**National Weather Service
Cleveland, OH
Calendar
2010**



Welcome to the first edition of the National Weather Service (NWS) calendar prepared by NWS Cleveland, Ohio staff. The National Weather Service in Cleveland is one of 122 offices in the United States, Puerto Rico, and Guam. The National Weather Service is an agency under the direction of the National Oceanic and Atmospheric Administration (NOAA), and dates back to 1870.

NWS Cleveland provides weather forecasts and warnings for 30 counties across Northern Ohio and Northwestern Pennsylvania. National Weather Service data for the county warning area can be obtained 24 hours a day from NOAA Weather Radio and on the Internet at: www.weather.gov/cleveland

Sample Calendar Legend:

15	92-1925
	25-1928
sr 717am	
ss 818pm	

*Record High-Year of Occurrence
Record Low-Year of Occurrence*

*Sunrise local time
Sunset local time*

*NOTE: All Record temperature and sunrise/sunset
data are for Cleveland.*

NOAA Weather Radio All-Hazards

The most important weather safety rule of all is to know when you are at risk from a hazardous weather. Your best source for this information is the National Weather Service whose mission is to issue official weather watches, warnings, and advisories.

For over 130 years the National Weather Service has been serving and protecting the nation's citizens by monitoring the weather and providing alerts to any dangers.

How does one get this information? The most reliable method is via the NOAA Weather Radio broadcasts. NOAA Weather Radio (NWR) is a nationwide network of radio stations broadcasting continuous weather information direct from your local National Weather Service office.

NWR broadcasts National Weather Service warnings, watches, forecasts and other hazard and local information 24 hours a day. The information broadcast on the NWR is tailored for your area.

Working with the Federal Communication Commission's (FCC) Emergency Alert System, NWR is an "all hazards" radio network, making it your single source for comprehensive weather and emergency information. In addition to weather hazards, NWR also broadcasts warning and post-event information regarding earthquakes and volcanic activity, and environmental hazards like chemical releases and oil spills.

NWR broadcasts from numerous [transmitters, covering all 50 states](#), adjacent coastal waters, Puerto Rico, the U.S. Virgin Islands, and the U.S. Pacific Territories. When a hazardous weather watch or warning is needed, an alert with a tone will automatically activate most receivers. The newest receivers have the ability to be set for just your county or any group of surrounding counties.

NWR receivers can be purchased at many electronic retail stores, electronic departments within department stores, and some drug stores. NWR's can also be purchased through some mail order catalogs. They are often sold in boat and marine accessory businesses. Prices vary from \$20 to \$200, depending on the model. The tone alarm feature will be found on models generally from \$35 and up.








*NWR Radio
frequencies across
the Northern Ohio:*

Cleveland 162.550

Grafton 162.500

Akron 162.400

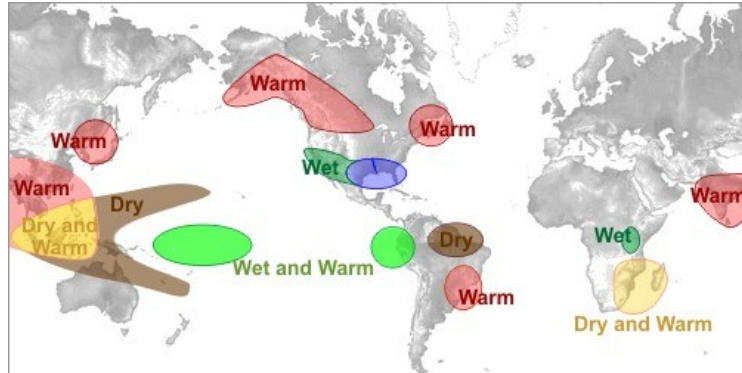


		<p>NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES:</p> <p>Cleveland 162.550 Grafton 162.500 Akron 162.400</p>			<p>1 69 1876 -4 1968 sr-753am ss-508pm New Years Day</p>	<p>2 66 1876 -12 1879 sr-753am ss-508pm</p>
<p>3 65 1874 -16 1879 sr-753am ss-509pm</p>	<p>4 65 1997 -7 1879 sr-753am ss-510pm</p>	<p>5 66 1939 -13 1884 sr-753am ss-511pm</p>	<p>6 66 1946 -9 1884 sr-753am ss-512pm</p>	<p>7 65 2008 -7 1884 sr-753am ss-513pm  Last Quarter</p>	<p>8 66 1937 -10 1968 sr-753am ss-514pm</p>	<p>9 66 1937 -13 1875 sr-753am ss-515pm</p>
<p>10 61 1939 -12 1875 sr-752am ss-516pm</p>	<p>11 67 1890 -9 1899 sr-752am ss-517pm</p>	<p>12 65 1916 -9 1886 sr-752am ss-518pm</p>	<p>13 69 1890 -10 1977 sr-752am ss-520pm</p>	<p>14 70 1932 -6 1893 sr-751am ss-521pm</p>	<p>15 68 1932 -7 1972 sr-751am ss-522pm  New Moon</p>	<p>16 57 1889 -15 1977 sr-750am ss-523pm</p>
<p>17 60 1973 -17 1982 sr-750am ss-524pm</p>	<p>18 64 1996 -14 1994 sr-749am ss-525pm Martin Luther King Jr. Day</p>	<p>19 67 1907 -20 1994 sr-749am ss-527pm</p>	<p>20 65 1906 -18 1985 sr-748am ss-528pm</p>	<p>21 71 1906 -17 1985 sr-747am ss-529pm</p>	<p>22 71 1906 -10 1936 sr-747am ss-530pm</p>	<p>23 68 1967 -17 1963 sr-746am ss-531pm  1st Quarter</p>
<p>24/ 31 65 1909 -19 1963 sr-745am ss-533pm 62 1989 -5 1971 sr-739am ss-541pm</p>	<p>25 73 1950 -15 1897 sr-745am ss-534pm</p>	<p>26 69 1950 -9 1897 sr-744am ss-535pm</p>	<p>27 69 1916 -6 1936 sr-743am ss-536pm</p>	<p>28 62 2002 -10 1977 sr-742am ss-538pm</p>	<p>29 65 1914 -17 1873 sr-741am ss-539pm</p>	<p>30 62 1916 -4 1873 sr-740am ss-540pm  Full Moon</p>

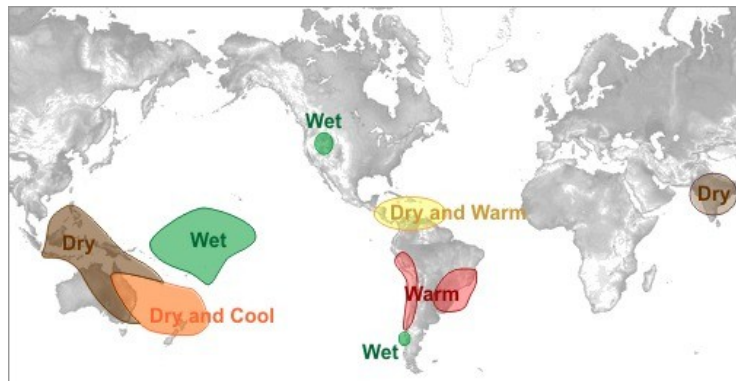


El Niño and La Niña are determined by the position of the warm water along the equator as it shifts back and forth across the Pacific Ocean. The warmest water is also the position where the greatest evaporation of water into the atmosphere occurs. This has a profound effect on the average position of the jet stream which, in turn, affects the storm track.

During El Niño, the warmest water along the equator shifts eastward. This causes the jet stream's position to dip in the Eastern Pacific. The stronger the El Niño, the farther east in the Eastern Pacific the dip in the jet stream occurs. Conversely, during La Niña, the warmest water shifts westward. This shift causes the dip in the jet stream to shift west of its normal position toward the Central Pacific. The shift in the jet stream and storm track can have profound effects on temperature and precipitation patterns around the world. Below are the average long term impacts for El Niño and La Niña episodes.

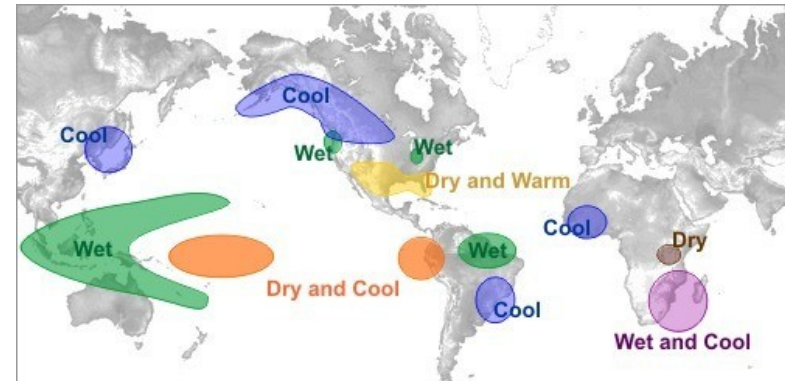


Average El Niño Impact (December-February)

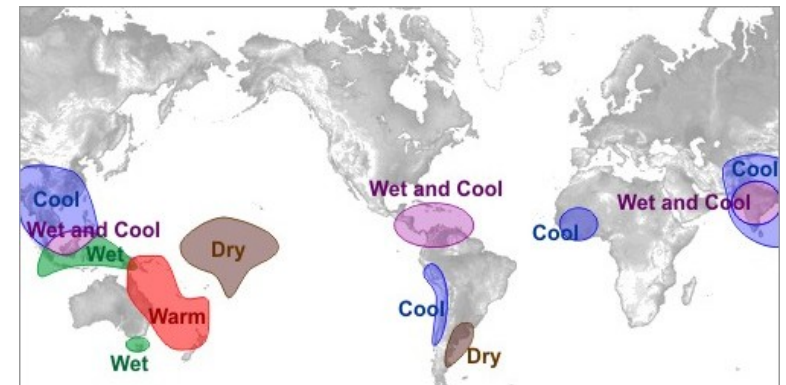


Average El Niño Impact (June-August)





El Niño and La Niña



Average La Niña Impact (December-February)



Average La Niña Impact (June-August)

	1 59 1989 -6 1971 sr-738am ss-543pm	2 61 1903 -7 1971 sr-737am ss-544pm	3 57 1890 -8 1996 sr-736am ss-545pm	4 65 1890 -10 1996 sr-735am ss-546pm	5 61 1938 -13 1918 sr-734am ss-548pm  Last Quarter	6 61 1938 -6 1895 sr-733am ss-549pm
7 60 1925 -3 1988 sr-732am ss-550pm	8 69 1937 -8 1977 sr-731am ss-552pm	9 63 2001 -14 1899 sr-729am ss-553pm	10 66 1932 -16 1899 sr-728am ss-554pm	11 73 1932 -15 1885 sr-727am ss-555pm	12 68 1999 -9 1917 sr-726am ss-557pm	13 68 1938 -9 1905 sr-724am ss-558pm  New Moon
14 62 1918 -11 1905 sr-723am ss-559pm Valentines Day	15 67 1954 -4 2007 sr-722am ss-600pm Presidents Day	16 72 1883 -8 1904 sr-720am ss-602pm	17 62 1911 -7 1885 sr-719am ss-603pm	18 62 1981 -5 1936 sr-718am ss-604pm	19 68 1939 -4 1936 sr-716am ss-605pm	20 69 1930 -3 1968 sr-715am ss-606pm
21 70 1997 -3 1885 sr-713am ss-608pm  1 st Quarter	22 72 1930 -8 1963 sr-712am ss-609pm	23 66 2000 -4 1873 sr-710am ss-610pm	24 69 1961 -7 1889 sr-709am ss-611pm	25 70 1930 -5 1993 sr-707am ss-612pm	26 74 2000 -15 1963 sr-706am ss-614pm	27 66 1996 -10 1963 sr-704am ss-615pm
28 67 1939 0 1884 sr-703am ss-616pm  Full Moon			NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES: Cleveland 162.550 Grafton 162.500 Akron 162.400			

Flash Floods



Flooding Safety

Follow these safety rules:

- _ If flooding occurs, get to higher ground. Stay away from flood-prone areas, including dips, low spots, valleys, ditches, washes, etc.*
- _ Avoid flooded areas or those with rapid water flow. Do not attempt to cross a flowing stream. It takes only six inches of fast flowing water to sweep you off your feet.*
- _ Don't allow children to play near high water, storm drains or ditches. Hidden dangers could lie beneath the water.*
- _ Flooded roads could have significant damage hidden by floodwaters. **NEVER** drive through floodwaters or on flooded roads. If your vehicle stalls, leave it immediately and seek higher ground. Water only two feet deep can float away most automobiles.*
- _ Do not camp or park your vehicle along streams and washes, particularly when threatening conditions exist.*
- _ Be especially cautious at night when it is harder to recognize flood dangers.*
- _ Monitor NOAA Weather Radio or your local media for vital weather related information.*

Except for heat related fatalities, more deaths occur from flooding than any other hazard. Why? Most people fail to realize the power of water. For example, six inches of fast-moving flood water can knock you off your feet.

While the number of fatalities can vary dramatically with weather conditions from year to year, the national 30-year average for flood deaths is 127. That compares with a 30-year average of 73 deaths for lightning, 68 for tornadoes and 16 for hurricanes.

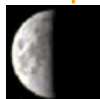


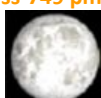

National Weather Service data also shows:

- Nearly half of all flash flood fatalities are vehicle-related,
- The majority of victims are males, and
- Flood deaths affect all age groups.

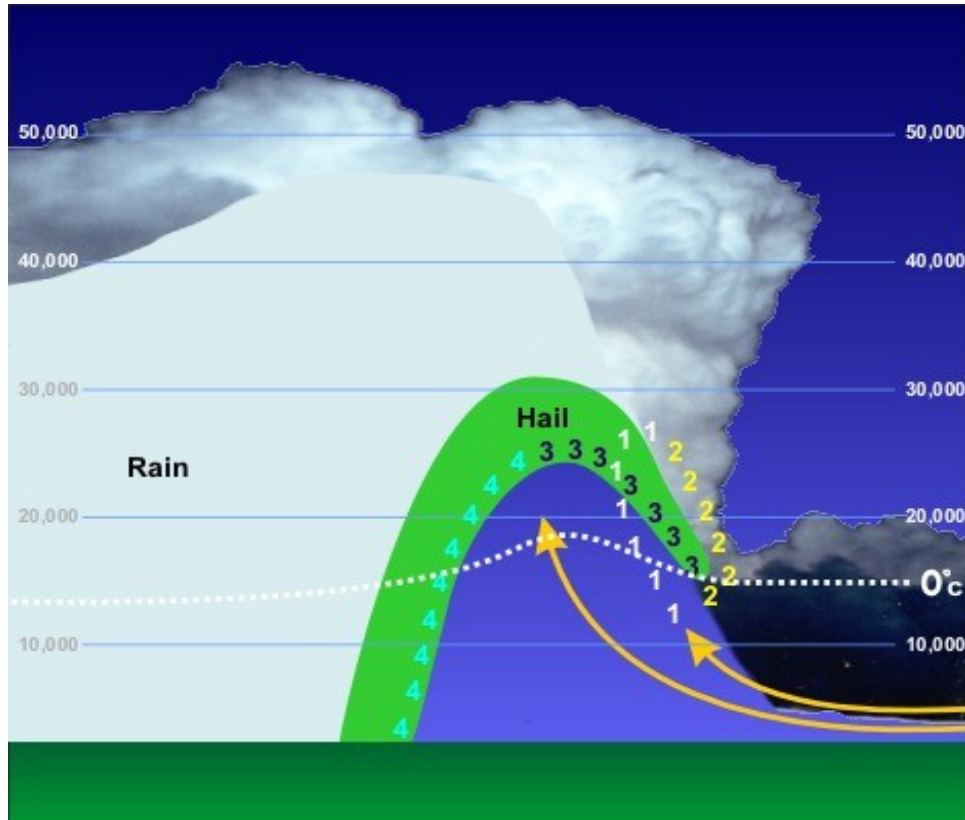
Most flash floods are caused by slow moving thunderstorms, thunderstorms that move repeatedly over the same area or heavy rains from tropical storms and hurricanes. These floods can develop within minutes or hours depending on the intensity and duration of the rain, the topography, soil conditions and ground cover.

Flash floods can roll boulders, tear out trees, destroy buildings and bridges, and scour out new channels. Rapidly rising water can reach heights of 30 feet or more. Furthermore, flash flood-producing rains can also trigger catastrophic mud slides.

Occasionally, floating debris can accumulate at a natural or man-made obstruction and restrict the flow of water. Water held back by the debris dam can cause flooding upstream. Subsequent flash flooding can occur downstream if the obstruction should suddenly release.

	1 69-1972 -2-1884 sr-701 am ss-617 pm	2 64-1991 -4-1978 sr-700 am ss-618 pm	3 74-1974 2-2003 sr-658 am ss-620 pm	4 76-1983 2-1943 sr-657 am ss-621 pm	5 81-1983 -2-1873 sr-655 am ss-622 pm	6 74-1973 -2-1960 sr-653 am ss-623 pm
7 76-2000 3-1960 sr-652 am ss-624 pm  Last Quarter	8 79-2000 -1-1960 sr-650 am ss-625 pm	9 73-1878 -5-1984 sr-648 am ss-626 pm	10 72-1973 5-1984 sr-647 am ss-628 pm	11 73-1977 -3-1960 sr-645 am ss-629 pm	12 75-1990 -5-1948 sr-644 am ss-630 pm	13 76-1990 3-1960 sr-642 am ss-631 pm
14 79-1990 6-1993 sr-740 am ss-732 pm Daylight Saving Time Begins	15 80-1990 3-1993 sr-738 am ss-733 pm  New Moon	16 78-1945 7-1885 sr-737 am ss-734 pm	17 72-1945 0-1900 sr-735 am ss-735 pm St. Patrick's Day	18 75-1903 0-1877 sr-733 am ss-737 pm	19 76-1903 7-1885 sr-732 am ss-738 pm	20 76-1995 0-1885 sr-730 am ss-739 pm Spring begins 1:32 pm
21 76-1938 -4-1885 sr-728 am ss-740 pm	22 83-1938 0-1885 sr-727 am ss-741 pm	23 77-1966 5-1885 sr-725 am ss-742 pm  1 st Quarter	24 83-1910 8-1888 sr-723 am ss-743 pm	25 83-1945 4-1974 sr-722 am ss-744 pm	26 80-1967 14-2001 sr-720 am ss-745 pm	27 80-1998 12-1982 sr-718 am ss-746 pm
28 80-1945 9-1982 sr-717 am ss-748 pm	29 81-1910 11-1887 sr-715 am ss-749 pm  Full Moon	30 82-1986 16-1887 sr-713 am ss-750 pm	31 80-1998 11-1923 sr-711 am ss-751 pm			NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES: Cleveland 162.550 Grafton 162.500 Akron 162.400

How Hail is Formed



1. The hail nucleus is carried aloft by the updraft and begins to grow in size as it collides with supercooled raindrops and other small pieces of hail.
2. Sometimes the hailstone is blown out of the main updraft and begins to fall to the earth.
3. If the updraft is strong enough it will move the hailstone back into the cloud where it once again collides with water and hail and grows. This process may be repeated several times.
4. In all cases, when the hailstone can no longer be supported by the updraft it falls to the earth. The stronger the updraft, the larger the hailstones that can be produced by the thunderstorm.








Largest recorded hail stone measured 7 inches in diameter. This stone fell in Aurora, Nebraska on the 22nd of June in 2003.

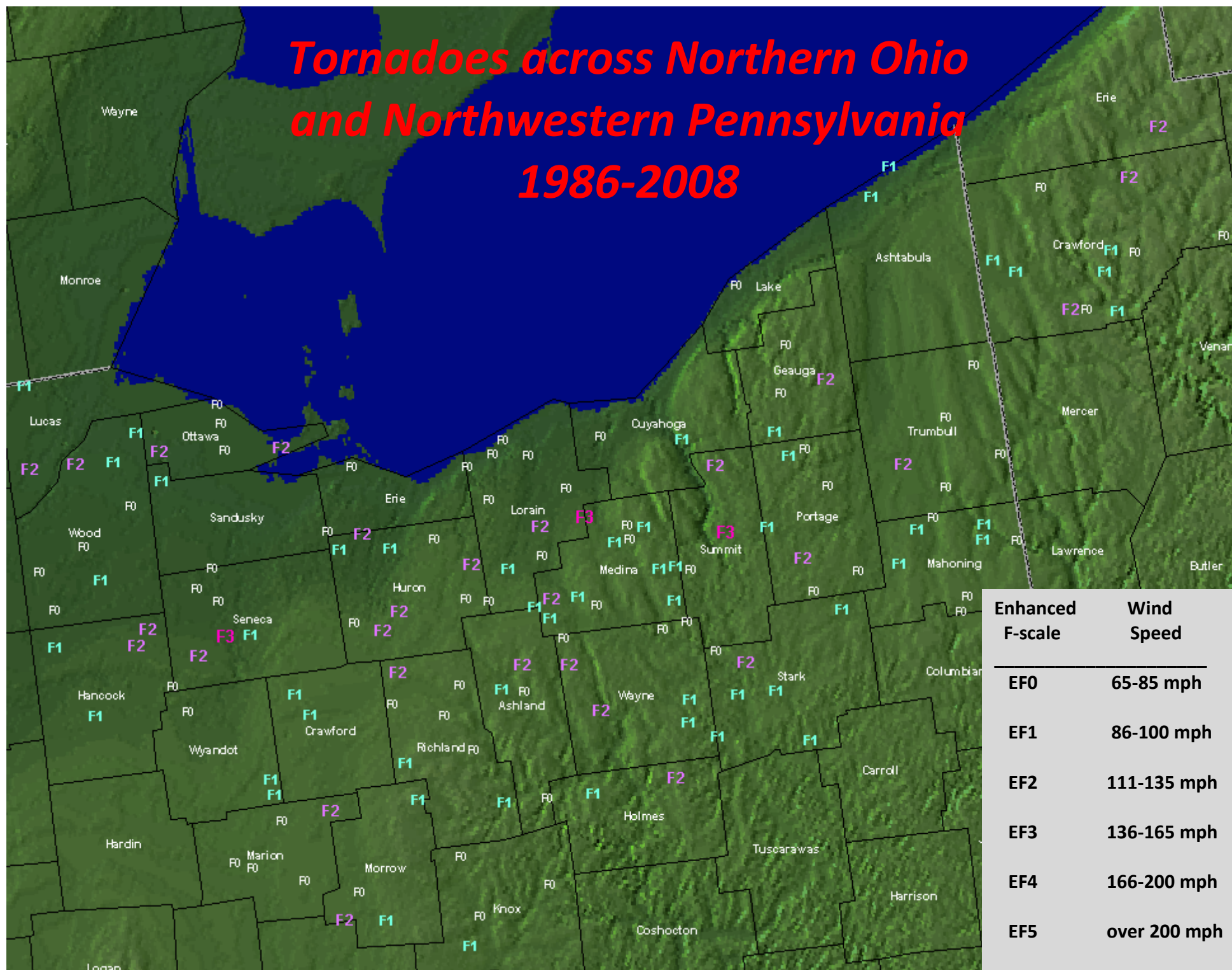
Hailstone size	Measurement		Updraft Speed	
	in.	cm.	mph	m/s
bb	< 1/4	< 0.64	< 24	< 11
pea	1/4	0.64	24	11
marble	1/2	1.3	35	16
dime	7/10	1.8	38	17
penny	3/4	1.9	40	18
nickel	7/8	2.2	46	21
quarter	1	2.5	49	22
half dollar	1 1/4	3.2	54	24
walnut	1 1/2	3.8	60	27
golf ball	1 3/4	4.4	64	29
hen egg	2	5.1	69	31
tennis ball	2 1/2	6.4	77	34
baseball	2 3/4	7.0	81	36
tea cup	3	7.6	84	38
grapefruit	4	10.1	98	44
softball	4 1/2	11.4	103	46

SEVERE



		<p>NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES:</p> <p>Cleveland 162.550 Grafton 162.500 Akron 162.400</p>		<p>1 80-1986 10-1964</p> <p>sr-710 am ss-752 pm</p>	<p>2 81-1963 19-1883</p> <p>sr-708 am ss-753 pm</p>	<p>3 80-2007 19-1954</p> <p>sr-706 am ss-754 pm</p>
<p>4 77-1882 19-1971</p> <p>sr-705 am ss-755 pm</p> <p>Easter</p>	<p>5 81-1988 16-1881</p> <p>sr-703 am ss-756 pm</p>	<p>6 84-1929 21-1982</p> <p>sr-701 am ss-757 pm</p>  <p>Last Quarter</p>	<p>7 83-1929 17-1982</p> <p>sr-700 am ss-758 pm</p>	<p>8 80-2001 11-1982</p> <p>sr-658 am ss-759 pm</p>	<p>9 81-1931 17-1972</p> <p>sr-657 am ss-801 pm</p>	<p>10 83-1978 20-1997</p> <p>sr-655 am ss-802 pm</p>
<p>11 82-1945 22-1882</p> <p>sr-653 am ss-803 pm</p>	<p>12 82-2001 20-1939</p> <p>sr-652 am ss-804 pm</p>	<p>13 83-1941 20-1950</p> <p>sr-650 am ss-805 pm</p>	<p>14 85-1883 20-1950</p> <p>sr-649 am ss-806 pm</p>  <p>New Moon</p>	<p>15 82-2003 22-1935</p> <p>sr-647 am ss-807 pm</p>	<p>16 85-2002 18-1875</p> <p>sr-645 am ss-808 pm</p>	<p>17 84-1896 15-1875</p> <p>sr-644 am ss-809 pm</p>
<p>18 85-1896 17-1875</p> <p>sr-642 am ss-810 pm</p>	<p>19 84-1938 22-1887</p> <p>sr-641 am ss-811 pm</p>	<p>20 83-1985 23-1904</p> <p>sr-639 am ss-812 pm</p>	<p>21 86-1952 24-1875</p> <p>sr-638 am ss-814 pm</p>  <p>1st Quarter</p>	<p>22 84-1985 23-1875</p> <p>sr-636 am ss-815 pm</p> <p>Earth Day</p>	<p>23 86-1985 27-1994</p> <p>sr-635 am ss-816 pm</p>	<p>24 88-1925 28-2003</p> <p>sr-633 am ss-817 pm</p>
<p>25 87-1990 27-1888</p> <p>sr-632 am ss-818 pm</p>	<p>26 87-1948 26-1972</p> <p>sr-631 am ss-819 pm</p>	<p>27 86-1990 27-1971</p> <p>sr-629 am ss-820 pm</p>	<p>28 88-1986 25-1947</p> <p>sr-628 am ss-821 pm</p>  <p>Full Moon</p>	<p>29 84-1899 25-1977</p> <p>sr-626 am ss-822 pm</p>	<p>30 88-1942 28-1969</p> <p>sr-625 am ss-823 pm</p>	

Tornadoes across Northern Ohio and Northwestern Pennsylvania 1986-2008








TUE

WED

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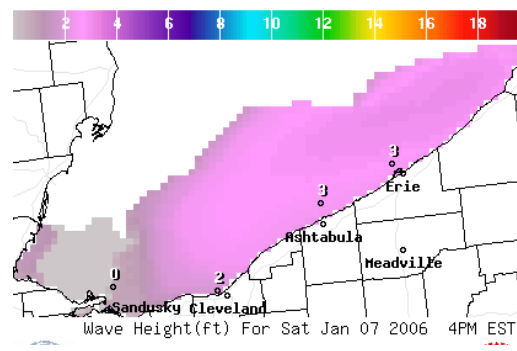
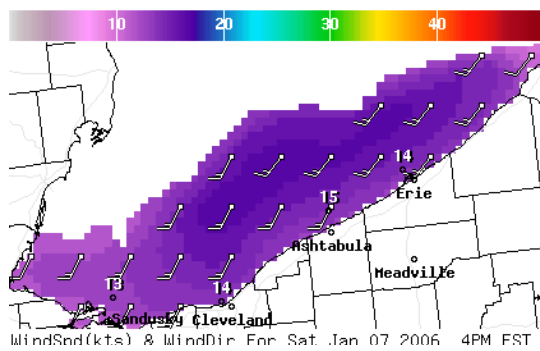
FRI

SAT

		<p>NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES:</p> <p>Cleveland 162.550 Grafton 162.500 Akron 162.400</p>				<p>1 88-1942 28-1876</p> <p>sr-624 am ss-824 pm</p>
<p>2 86-1951 26-1963</p> <p>sr-622 am ss-825 pm</p>	<p>3 85-1955 27-1986</p> <p>sr-621 am ss-826 pm</p>	<p>4 88-1949 28-1971</p> <p>sr-620 am ss-828 pm</p>	<p>5 89-1949 30-1968</p> <p>sr-619 am ss-829 pm</p>	<p>6 92-1959 26-1968</p> <p>sr-617 am ss-830 pm</p>  <p>Last Quarter</p>	<p>7 86-1936 28-1970</p> <p>sr-616 am ss-831 pm</p>	<p>8 88-1889 30-1976</p> <p>sr-615 am ss-832 pm</p>
<p>9 88-1979 29-1983</p> <p>sr-614 am ss-833 pm</p> <p>Mother's Day</p>	<p>10 90-1953 25-1966</p> <p>sr-613 am ss-834 pm</p>	<p>11 87-1881 33-1977</p> <p>sr-612 am ss-835 pm</p>	<p>12 87-1881 32-1976</p> <p>sr-611 am ss-836 pm</p>	<p>13 86-1991 30-1996</p> <p>sr-610 am ss-837 pm</p>  <p>New Moon</p>	<p>14 91-1962 30-1996</p> <p>sr-609 am ss-838 pm</p>	<p>15 89-1962 35-1977</p> <p>sr-608 am ss-839 pm</p>
<p>16 89-1991 29-1984</p> <p>sr-607 am ss-840 pm</p>	<p>17 90-1962 33-1979</p> <p>sr-606 am ss-841 pm</p>	<p>18 91-1962 34-2009</p> <p>sr-605 am ss-842 pm</p>	<p>19 88-1998 33-1976</p> <p>sr-604 am ss-843 pm</p>	<p>20 91-1962 34-1981</p> <p>sr-603 am ss-844 pm</p>  <p>1st Quarter</p>	<p>21 89-1941 32-1895</p> <p>sr-602 am ss-845 pm</p>	<p>22 89-1911 35-2002</p> <p>sr-601 am ss-846 pm</p>
<p>23/ 30 90-1991 34-1961 92-1879 32-1961 sr-556 am ss-853 pm</p>	<p>24/ 31 89-1950 32-1963 sr-600 am ss-847 pm Memorial Day 92-1944 39-1996 sr-556 am ss-853 pm</p>	<p>25 89-1914 35-1956</p> <p>sr-559 am ss-848 pm</p>	<p>26 89-1914 34-1969</p> <p>sr-559 am ss-849 pm</p>	<p>27 90-1967 35-1969</p> <p>sr-558 am ss-850 pm</p>  <p>Full Moon</p>	<p>28 89-1991 37-1971</p> <p>sr-557 am ss-851 pm</p>	<p>29 91-1991 37-2008</p> <p>sr-557 am ss-852 pm</p>

Wind and Waves

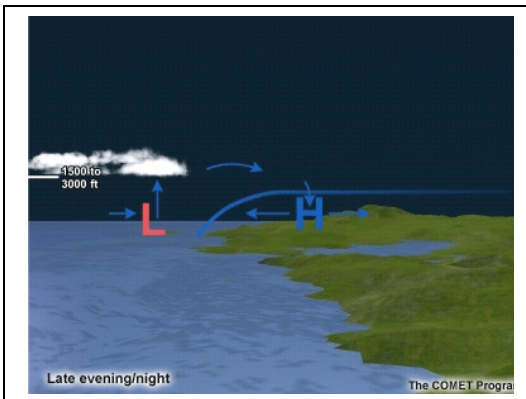
Wave Generation



Waves increase in height from upwind end of the lake to the downwind end. Note: Left graphic above shows wind blowing from the western end of Lake Erie to the eastern end. Higher waves at east end of the lake in right graphic.

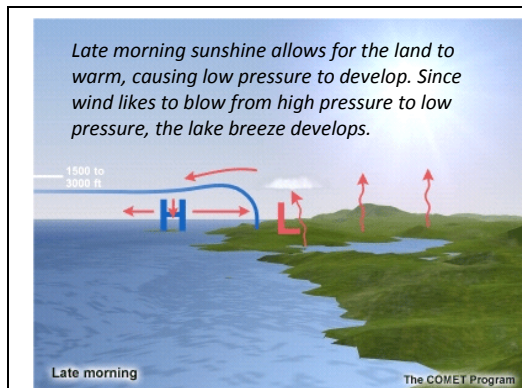


Land Breeze

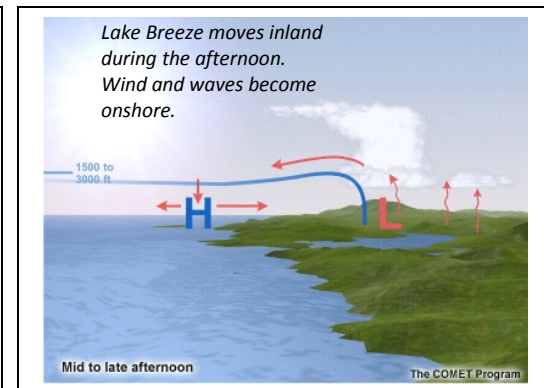


Lake Breeze

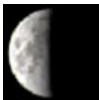




Late morning sunshine allows for the land to warm, causing low pressure to develop. Since wind likes to blow from high pressure to low pressure, the lake breeze develops.



Lake Breeze moves inland during the afternoon. Wind and waves become onshore.



Land and Lake Breezes develop due to the difference in the temperature of the water and the land. Land heats and cools faster than water and will be cooler than the water at night and warmer during the day. Warm water/land causes low pressure and cold water/land causes high pressure. Air moves from high pressure to low pressure.

<p>NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES:</p> <p>Cleveland 162.550 Grafton 162.500 Akron 162.400</p>		<p>1 95 1934 40 1981</p> <p>sr-555am ss-854pm</p>	<p>2 94 1934 39 1966</p> <p>sr-555am ss-855pm</p>	<p>3 91 1925 35 1977</p> <p>sr-554am ss-856pm</p>	<p>4 93 1925 40 1947</p> <p>sr-554am ss-856pm</p>  <p>Last Quarter</p>	<p>5 93 1925 38 1990</p> <p>sr-554am ss-857pm</p>
<p>6 92 1988 38 1945</p> <p>sr-553am ss-858pm</p>	<p>7 91 2005 39 1977</p> <p>sr-553am ss-858pm</p>	<p>8 98 1933 39 1977</p> <p>sr-553am ss-859pm</p>	<p>9 92 1914 41 1949</p> <p>sr-553am ss-859pm</p>	<p>10 92 2005 37 1972</p> <p>sr-553am ss-900pm</p>	<p>11 93 1933 31 1972</p> <p>sr-552am ss-900pm</p>	<p>12 92 1954 42 1980</p> <p>sr-552am ss-901pm</p>  <p>New Moon</p>
<p>13 93 1954 43 1979</p> <p>sr-552am ss-901pm</p>	<p>14 95 1988 43 1978</p> <p>sr-552am ss-902pm</p>	<p>15 97 1954 43 1997</p> <p>sr-552am ss-902pm</p>	<p>16 96 1952 39 1961</p> <p>sr-552am ss-903pm</p>	<p>17 93 1994 38 1980</p> <p>sr-552am ss-903pm</p>	<p>18 96 1944 41 1950</p> <p>sr-553am ss-903pm</p>	<p>19 92 1995 46 1965</p> <p>sr-553am ss-903pm</p>  <p>1st Quarter</p>
<p>20 96 1988 46 2004</p> <p>sr-553am ss-904pm</p> <p>Father's Day</p>	<p>21 95 1941 45 1897</p> <p>sr-553am ss-904pm</p> <p>Summer Begins 728 am</p>	<p>22 98 1988 39 1992</p> <p>sr-553am ss-904pm</p>	<p>23 94 1948 41 1963</p> <p>sr-554am ss-904pm</p>	<p>24 96 1952 44 1915</p> <p>sr-554am ss-904pm</p>	<p>25 104 1988 41 1979</p> <p>sr-554am ss-904pm</p>	<p>26 99 1952 47 1984</p> <p>sr-554am ss-904pm</p>  <p>Full Moon</p>
<p>27 98 1944 44 1981</p> <p>sr-555am ss-904pm</p>	<p>28 101 1944 49 1988</p> <p>sr-555am ss-904pm</p>	<p>29 94 1952 51 1985</p> <p>sr-556am ss-904pm</p>	<p>30 95 1941 48 1988</p> <p>sr-556am ss-904pm</p>			

Lightning Safety

Lightning is the MOST UNDERRATED weather hazard. On average, only floods kill more people. Lightning makes every single thunderstorm a potential killer, whether the storm produces one single bolt or ten thousand bolts.

In the United States, lightning routinely kills more people each year than tornadoes or hurricanes. Tornadoes, hail, and wind gusts get the most attention, but only lightning can strike outside the storm itself. Lightning is the first thunderstorm hazard to arrive and the last to leave.

Lightning is one of the most capricious and unpredictable characteristics of a thunderstorm. Because of this, no one can guarantee an individual or group absolute protection from lightning. However, knowing and following proven lightning safety guidelines can greatly reduce the risk of injury or death. Remember, **YOU** are ultimately responsible for your personal safety, and should take appropriate action when threatened by lightning.

While no place is 100% safe from lightning, some places are much safer than others.



Where to Go

The safest location during a thunderstorm is inside a large enclosed structure with plumbing and electrical wiring. These include shopping centers, schools, office buildings, and private residences.

If lightning strikes the building, the plumbing and wiring will conduct the electricity more efficiently than a human body. If no buildings are available, then an enclosed metal vehicle such as an automobile, van, or school bus makes a decent alternative.

Where NOT to Go

Not all types of buildings or vehicles are safe during thunderstorms. Buildings which are NOT SAFE (even if they are "grounded") have exposed openings. These include beach shacks, metal sheds, picnic shelters/pavilions, carports, and baseball dugouts. Porches are dangerous as well.

Convertible vehicles offer no safety from lightning, even if the top is "up". Other vehicles which are NOT SAFE during lightning storms are those which have open cabs, such as golf carts, tractors, and construction equipment.

When Thunder Roars, Go Indoors

Studies have shown most people struck by lightning are struck not at the height of a thunderstorm, but before and after the storm has peaked. This is because lightning can strike as far as 10 miles from the area where it is raining and many people are unaware of how far lightning can strike from its parent thunderstorm.

Therefore, if you can hear thunder, you are within striking distance. Seek safe shelter immediately. Remember this lightning safety rule...When thunder roars, go indoors and stay there until 30 minutes after the last clap of thunder. DO NOT wait for the rain to start before seeking shelter, and do not leave shelter just because the rain has ended.

With common sense, you can greatly increase your safety and the safety of those you are with. At the first clap of thunder, go to a large building or fully enclosed vehicle and wait 30 minutes after the last clap of thunder before you to go back outside.

SUN

MON



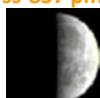

TUE

WED

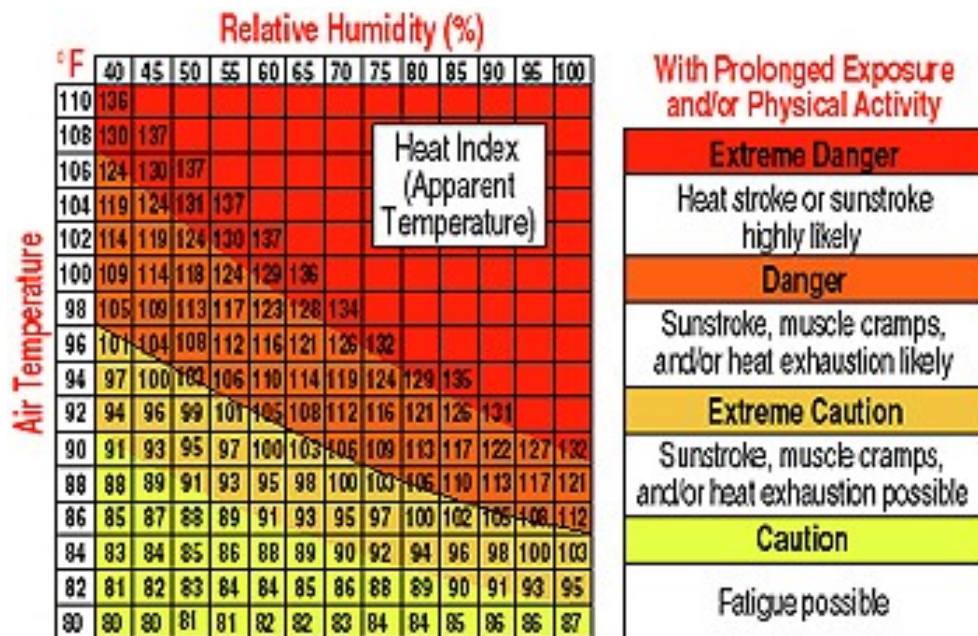
THU

FRI

SAT

<p>NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES:</p> <p>Cleveland 162.550 Grafton 162.500 Akron 162.400</p>				<p>1 95-2002 45-1988</p> <p>sr-557 am ss-904 pm</p>	<p>2 97-1954 47-1943</p> <p>sr-557 am ss-904 pm</p>	<p>3 98-1949 46-1907</p> <p>sr-558 am ss-904 pm</p>
<p>4 98-1990 41-1968</p> <p>sr-558 am ss-904 pm</p>  <p>Last Quarter Independence Day</p>	<p>5 96-1949 48-1979</p> <p>sr-558 am ss-903 pm</p> <p>Independence Day (observed)</p>	<p>6 97-1988 45-1979</p> <p>sr-559 am ss-903 pm</p>	<p>7 99-1988 45-1968</p> <p>sr-600 am ss-903 pm</p>	<p>8 99-1988 45-1984</p> <p>sr-601 am ss-902 pm</p>	<p>9 97-1936 43-1961</p> <p>sr-601 am ss-902 pm</p>	<p>10 97-1936 46-1963</p> <p>sr-602 am ss-902 pm</p>
<p>11 99-1936 48-1996</p> <p>sr-603 am ss-901 pm</p>  <p>New Moon</p>	<p>12 95-1936 48-1978</p> <p>sr-604 am ss-901 pm</p>	<p>13 95-1952 51-1976</p> <p>sr-604 am ss-900 pm</p>	<p>14 99-1954 51-1926</p> <p>sr-605 am ss-859 pm</p>	<p>15 97-1980 48-1960</p> <p>sr-606 am ss-859 pm</p>	<p>16 100-1988 50-1954</p> <p>sr-607 am ss-858 pm</p>	<p>17 96-1942 49-1946</p> <p>sr-608 am ss-858 pm</p>
<p>18 96-1878 51-1971</p> <p>sr-608 am ss-857 pm</p>  <p>1st Quarter</p>	<p>19 95-1930 50-1979</p> <p>sr-609 am ss-856 pm</p>	<p>20 98-1930 46-1965</p> <p>sr-610 am ss-855 pm</p>	<p>21 97-1952 46-1966</p> <p>sr-611 am ss-855 pm</p>	<p>22 99-1952 47-1966</p> <p>sr-612 am ss-854 pm</p>	<p>23 96-1933 49-1981</p> <p>sr-613 am ss-853 pm</p>	<p>24 99-1934 50-2000</p> <p>sr-614 am ss-852 pm</p>
<p>25 99-1941 47-1953</p> <p>sr-615 am ss-851 pm</p>  <p>Full Moon</p>	<p>26 99-1941 46-1946</p> <p>sr-616 am ss-850 pm</p>	<p>27 103-1941 47-1946</p> <p>sr-617 am ss-849 pm</p>	<p>28 96-1993 52-1997</p> <p>sr-618 am ss-848 pm</p>	<p>29 95-1941 50-1984</p> <p>sr-618 am ss-847 pm</p>	<p>30 96-1941 50-1981</p> <p>sr-619 am ss-846 pm</p>	<p>31 97-1955 51-1891</p> <p>sr-620 am ss-845 pm</p>

HEAT INDEX CHART



Heat Wave Safety Tips

Slow down. Strenuous activities should be reduced, eliminated, or rescheduled to the coolest time of the day. Individuals at risk should stay in the coolest available place, not necessarily indoors.

Dress for summer. Lightweight, light-colored clothing reflects heat and sunlight, and helps your body maintain normal temperatures.

Put less fuel on your inner fires. Foods (like proteins) that increase metabolic heat production also increase water loss.

Drink plenty of water or other nonalcoholic fluids. Your body needs water to keep cool. Drink plenty of fluids even if you don't feel thirsty. Persons who (1) have epilepsy or heart, kidney, or liver disease, (2) are on fluid restrictive diets, or (3) have a problem with fluid retention should consult a physician before increasing their consumption of fluids.






Do not drink alcoholic beverages.

Do not take salt tablets unless specified by a physician. Persons on salt restrictive diets should consult a physician before increasing their salt intake.

Spend more time in air-conditioned places. Air conditioning in homes and other buildings markedly reduces danger from the heat. If you cannot afford an air conditioner, spending some time each day (during hot weather) in an air conditioned environment affords some protection (Heat Index chart provided by NWS Ft. Worth)

Don't get too much sun. Sunburn makes the job of heat dissipation that much more difficult.

Heat Index / Heat Disorders	
Heat Index	Possible heat disorders for people in higher risk groups
130°F or higher	Heatstroke/Sunstroke highly likely with continued exposure.
105° - 130°F	Sunstroke, heat cramps and heat exhaustion likely , and heatstroke possible with prolonged exposure and/or physical activity.
90° - 105°F	Sunstroke, heat cramps and heat exhaustion possible with prolonged exposure and/or physical activity.
80° - 90°F	Fatigue possible with prolonged exposure and/or physical activity.

1 95-1917 47-1960 sr-621am ss-844pm	2 97-1988 50-1962 sr-622am ss-843pm	3 97-1944 48-1976 sr-623am ss-842pm  Last Quarter	4 97-1930 46-1966 sr-624am ss-840pm	5 94-1955 46-1972 sr-625am ss-839pm	6 100-1918 45-1997 sr-626am ss-838pm	7 94-1918 48-1997 sr-627am ss-837pm
8 96-1941 47-1975 sr-628am ss-835pm	9 96-1949 50-1972 sr-629am ss-834pm  New Moon	10 97-1944 47-1972 sr-630am ss-833pm	11 96-1944 48-1965 sr-631am ss-832pm	12 99-1881 44-1967 sr-632am ss-830pm	13 95-2002 47-1982 sr-633am ss-829pm	14 97-1944 46-1964 sr-634am ss-827pm
15 96-1944 44-1962 sr-636am ss-826pm	16 96-1944 45-1979 sr-637am ss-825pm  1 st Quarter	17 99-1988 48-1971 sr-638am ss-823pm	18 96-1947 46-1981 sr-639am ss-822pm	19 100-1955 47-1964 sr-640am ss-820pm National Aviation Day	20 95-1947 46-1998 sr-641am ss-819pm	21 96-1947 45-1950 sr-642am ss-817pm
22 94-1936 45-1982 sr-643am ss-816pm	23 93-1954 48-1969 sr-644am ss-814pm	24 94-1947 44-1952 sr-645am ss-813pm  Full Moon	25 97-1948 45-1951 sr-646am ss-811pm	26 97-1948 47-1958 sr-647am ss-809pm	27 102-1948 49-1963 sr-648am ss-808pm	28 98-1953 42-1968 sr-649am ss-806pm
29 98-1953 38-1982 sr-650am ss-805pm	30 96-1953 45-1976 sr-651am ss-803pm	31 99-1953 46-1890 sr-652am ss-801pm			NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES: Cleveland 162.550 Grafton 162.500 Akron 162.400	

Waterspouts

Waterspouts:

Waterspouts come from two sources: 1) Cold air, 2) Tornadic.

The cold air waterspouts are caused by cold arctic air flowing over a warm body of water. Updrafts develop in a line of showers and become strong enough to produce the waterspout. Multiple updrafts in a line of showers can produce a family of waterspouts that occur at the same time. The vortex tends to form from clouds with a dark, flat bottom. Cold air waterspouts can move inland and do damage but they rapidly dissipate once they hit shore.

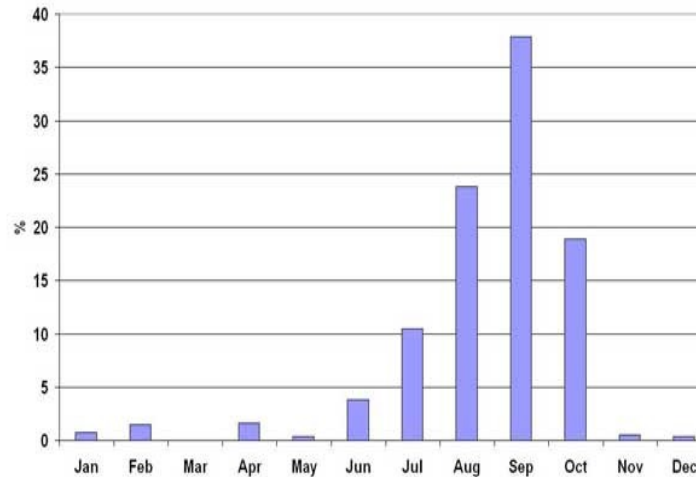
A tornadic waterspout is a tornado over water. Tornadic waterspouts are typically stronger than the cold air type and will continue once it moves on shore. If a waterspout is strong enough it may pluck fish out of the water and send them flying.

Boater Safety Around Waterspouts:

Boaters and mariners should stay up on the latest marine forecast whenever venturing out into open waters. National Weather Service marine forecasts will mention the potential for waterspouts when there is a good chance for them to occur.

If a waterspout develops while out on the water, move at right angles to its path. Stay well clear of the underside of a shower or dark cloud to prevent being trapped in a vortex. Waterspouts can capsize a boat. If a waterspout approaches you while on shore, move indoors away from windows for protection.

Monthly Waterspout Frequency






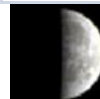

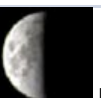
1. Dark spot. A prominent circular, light-colored disk appears on the surface, surrounded by a larger dark area of indeterminate shape and with diffused edges. While not visible to the mariner at sea level, the presence of a dark spot and an associated funnel cloud overhead indicate that a complete funnel is present.

2. Spiral pattern. A pattern of light and dark-colored surface bands spiraling out from the dark spot develops.

3. Spray ring. A dense swirling annulus (ring) of sea spray, called a cascade, appears around the dark spot with what appears to be an eye similar to that seen in hurricanes.

4. Mature vortex. The waterspout, now visible from sea surface to the overhead cloud mass, achieves maximum organization and intensity. Its funnel often appears hollow, with a surrounding shell of turbulent condensate. The spray vortex can rise to a height of several hundred feet or more and often creates a visible wake and an associated wave train as it moves.

5. Decay. The funnel and spray vortex begin to dissipate as the inflow of warm air into the vortex weakens. Frequently, rain showers that develop nearby (caused by the thermal updraft) create a down draft (or leading edge gust-front) of cooler air that accelerates the waterspout's decay. Ship masters whose vessels have been hit by waterspouts during the decay phase have reported being drenched with a combination of salt water and rain water.

SUN	MON	TUE	WED	THU	FRI	SAT
			1 101 1953 42 1970 sr-653am ss-800pm  Last Quarter	2 101 1953 45 1970 sr-654am ss-758pm	3 101 1953 44 1976 sr-655am ss-756pm	4 95 1953 41 1946 sr-656am ss-755pm
5 99 1954 44 1974 sr-657am ss-753pm	6 98 1954 40 1976 sr-658am ss-751pm Labor Day	7 94 1939 43 1962 sr-659am ss-750pm	8 95 1978 41 1951 sr-700am ss-748pm  New Moon	9 94 1959 44 1986 sr-701am ss-746pm Rosh Hashana	10 93 1964 39 1883 sr-702am ss-745pm	11 92 1952 42 1995 sr-703am ss-743pm
12 98 1952 40 1943 sr-704am ss-741pm	13 96 1952 38 1964 sr-705am ss-739pm	14 94 1939 37 1975 sr-706am ss-738pm	15 93 1991 37 1871 sr-707am ss-736pm  1 st Quarter	16 93 1991 39 1984 sr-708am ss-734pm	17 95 1955 37 1984 sr-709am ss-733pm	18 94 1955 39 1959 sr-710am ss-731pm Yom Kippur
19 93 1955 40 1973 sr-711am ss-729pm	20 92 1978 40 1956 sr-712am ss-727pm	21 90 1931 35 1956 sr-713am ss-726pm	22 92 1895 36 1904 sr-714am ss-724pm Autumn Begins at 1109 pm	23 88 1936 36 1995 sr-715am ss-722pm  Full Moon	24 87 1941 36 1995 sr-716am ss-720pm	25 88 2007 35 1976 sr-717am ss-719pm
26 91 1998 37 1947 sr-718am ss-717pm	27 88 1946 33 1947 sr-719am ss-715pm	28 89 1959 34 1984 sr-720am ss-714pm	29 95 1953 32 1942 sr-721am ss-712pm	30 86 1881 35 1963 sr-722am ss-710pm  Last Quarter	NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES: Cleveland 162.550 Grafton 162.500 Akron 162.400	

Average First Freeze Dates



OCTOBER 2010

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NOAA WEATHER RADIO
CAN BE FOUND AT THE
FOLLOWING
FREQUENCIES:
Cleveland 162.550
Grafton 162.500
Akron 162.400

1
sr-723am
ss-708pm
87 1952
34 1947


2
sr-724am
ss-707pm
86 1919
32 1975

3
sr-725am
ss-705pm
89 1953
29 1975

4
sr-727am
ss-703pm
88 1952
33 1981

5
sr-728am
ss-702pm
88 1951
32 1980

6
sr-729am
ss-700pm
90 1946
34 2003

7
sr-730am
ss-658pm
88 1946
30 1964
 New Moon

8
sr-731am
ss-657pm
88 2007
31 1952


9
sr-732am
ss-655pm
86 1949
30 1876

10
sr-733am
ss-654pm
86 1949
30 1895

11
sr-734am
ss-652pm
86 1928
25 1964
Columbus Day

12
sr-735am
ss-650pm
85 1893
26 1876

13
sr-736am
ss-649pm
82 1969
29 1875

14
sr-737am
ss-647pm
84 1989
30 1988
 1st Quarter

15
sr-739am
ss-646pm
86 1947
29 1876

16
sr-740am
ss-644pm
83 1962
29 1944


17
sr-741am
ss-643pm
82 1953
32 1981

18
sr-742am
ss-641pm
84 1950
28 1876

19
sr-743am
ss-640pm
84 1953
29 1986

20
sr-744am
ss-638pm
83 1953
27 1992

21
sr-745am
ss-637pm
83 1953
26 1952

22
sr-747am
ss-635pm
81 1947
27 1976
 Full Moon

23
sr-748am
ss-634pm
80 1963
25 1976

24/
sr-749am ss-632pm
80 1920
22 1969
31 Halloween
82 1950
19 1988
sr-757am ss-623pm
Day

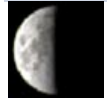
25
sr-750am
ss-631pm
80 1963
28 1982

26
sr-751am
ss-629pm
81 1963
24 1887

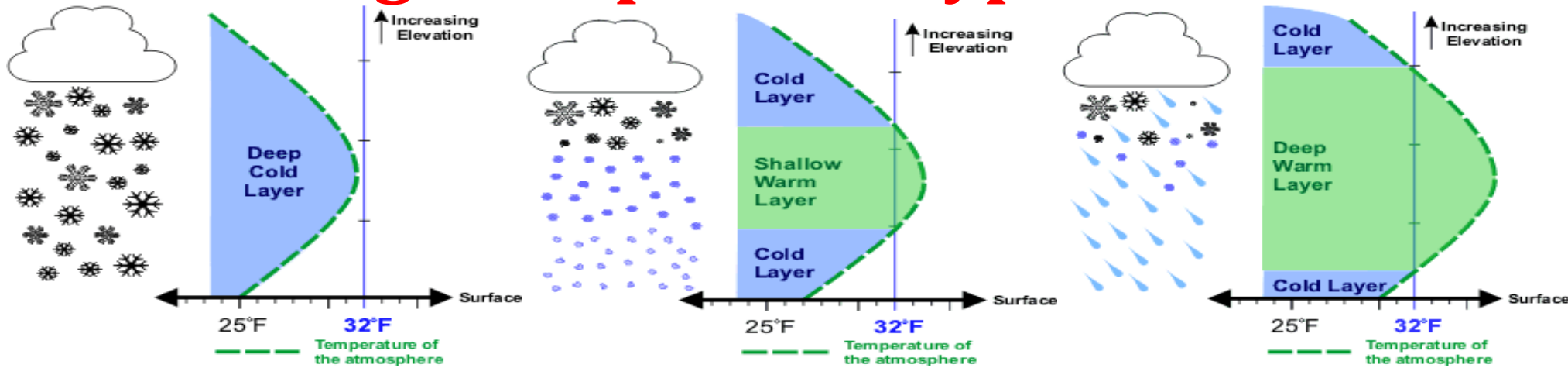
27
sr-752am
ss-628pm
78 1927
23 1962

28
sr-754am
ss-627pm
81 1927
24 1976

29
sr-755am
ss-625pm
78 1946
24 1980

30
sr-756am
ss-624pm
79 1950
23 1980
 Last Quarter

Forecasting Precipitation type in the Winter



In the image (left) the green dashed line is the temperature in respect to elevation. The surface temperature is 25°F (-4°C) and increases with height before decreasing. However, since the temperature remains below freezing any precipitation that falls will remain as snow.

Types of Warnings or Advisories that may be issued with this temperature profile follow:

Winter Storm/Lake Effect Snow Warning – 6" or greater in 12 hours, or 8" or greater in 24 hours

Winter Weather/Lake Effect Snow Advisory -- issued when from 1 up to 3 inches of snow are expected in a 12 hour period.

In this image the surface temperature is higher, 27°F (-3°C). Also as elevation increases, the temperature increases to a point where some of the atmosphere is above freezing before the temperature lowers again below freezing.

As snow falls into the layer of air where the temperature is above freezing, the snowflakes partially melt. As the precipitation reenters the air that is below freezing, the precipitation will re-freeze into ice pellets that bounce off the ground, commonly called sleet. The most likely place for freezing rain and sleet is to the north of warm fronts. The cause of the wintertime mess is a layer of air above freezing aloft.

Types of Warnings or Advisories that may be issued with this temperature profile follow:

Winter Storm Warning – 6 inches or more accumulation

Winter Weather Advisory -- sleet accumulation of less than 4 inches

Winter Weather Advisory – significant inconvenience to travel

Freezing rain will occur if the warm layer in the atmosphere is deep with only a shallow layer of below freezing air at the surface. The precipitation can begin as either rain and/or snow but becomes all rain in the warm layer. The rain falls back into the air that is below freezing but since the depth is shallow, the rain does not have time to freeze into sleet.



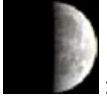


Upon hitting the ground or objects such as bridges and vehicles, the rain freezes on contact. Some of the most disastrous winter weather storms are due primarily to freezing rain.

Types of Warnings or Advisories that may be issued with this temperature profile follow:

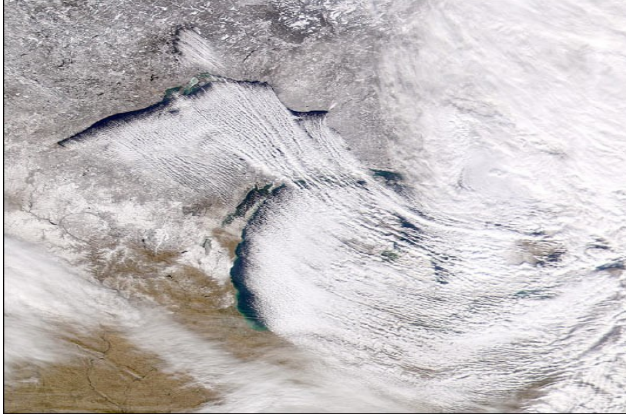
Ice Storm WARNING – 1/4 inch of glaze or more

Freezing Rain ADVISORY -- Light glaze accumulating less than 1/4 inch

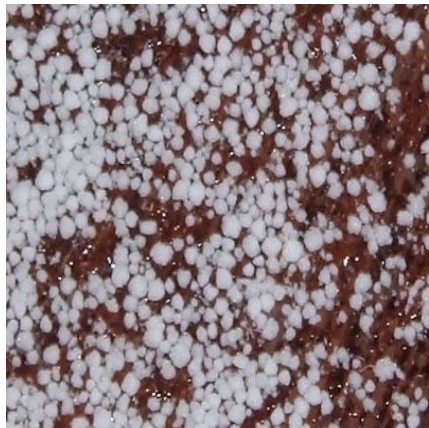
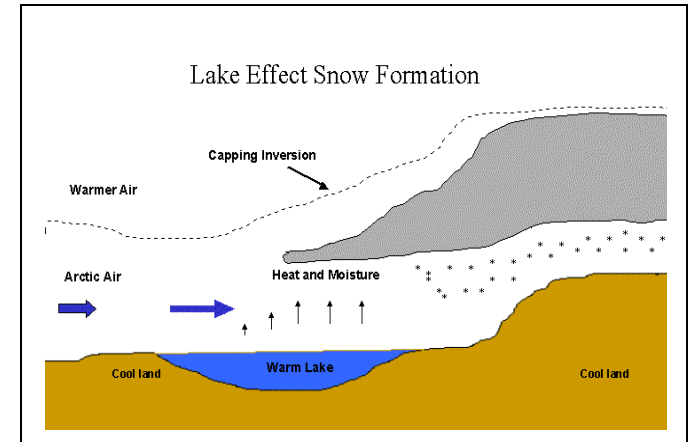
Winter Weather Advisory – significant inconvenience to travel

	1 82 1950 25 1954 sr-758am ss-622pm	2 77 2003 25 1895 sr-800am ss-620pm	3 79 1961 19 1951 sr-801am ss-619pm	4 79 2003 16 1991 sr-802am ss-618pm	5 75 1948 16 1991 sr-803am ss-617pm	6 76 1977 17 1951 sr-804am ss-616pm  New Moon
7 79 1938 23 1971 sr-706am ss-515pm Daylight Saving Time Ends	8 72 1945 19 1976 sr-707am ss-514pm	9 74 1975 22 1976 sr-708am ss-512pm	10 71 1998 19 1991 sr-709am ss-511pm	11 73 1915 21 1957 sr-710am ss-510pm Veterans Day	12 74 1949 18 1911 sr-712am ss-510pm	13 72 1989 15 1911 sr-713am ss-509pm  1 st Quarter
14 72 1994 13 1986 sr-714am ss-508pm	15 72 1927 14 1996 sr-715am ss-507pm	16 72 1931 12 1933 sr-716am ss-506pm	17 72 1954 14 1959 sr-718am ss-505pm	18 71 1954 10 1959 sr-719am ss-504pm	19 72 1908 4 1880 sr-720am ss-504pm	20 73 1931 15 1951 sr-721am ss-503pm
21 70 1930 3 1880 sr-722am ss-502pm  Full Moon	22 73 1934 0 1880 sr-724am ss-502pm	23 75 1931 7 1880 sr-725am ss-501pm	24 70 1931 7 1950 sr-726am ss-501pm	25 67 1908 13 2005 sr-727am ss-500pm Thanksgiving Day	26 70 1896 9 1880 sr-728am ss-500pm	27 71 1990 7 1880 sr-729am ss-459pm
28 69 2005 8 1955 sr-730am ss-459pm  Last Quarter	29 67 1933 6 1976 sr-731am ss-458pm	30 71 1934 3 1976 sr-732am ss-458pm			NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES: Cleveland 162.550 Grafton 162.500 Akron 162.400	

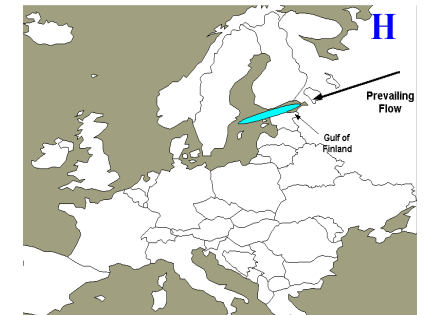
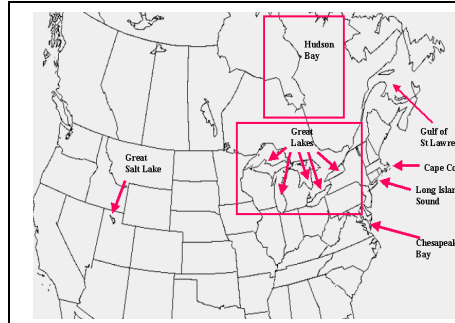
Lake Effect



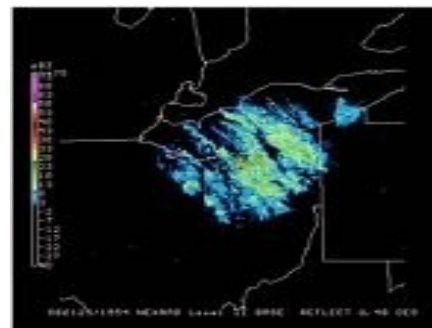
The diagram to the right shows how lake effect is formed. Cold arctic air moves over an open body of water and warms slightly while picking-up moisture. The moisture laden air moves inland and is forced upward by the higher terrain into the colder air aloft causing the moisture to fall out as precipitation. Depending on the temperature over land, the precipitation can fall in the form of rain or snow. The photo to the left shows lake effect snow bands to the lee of the Great Lakes.



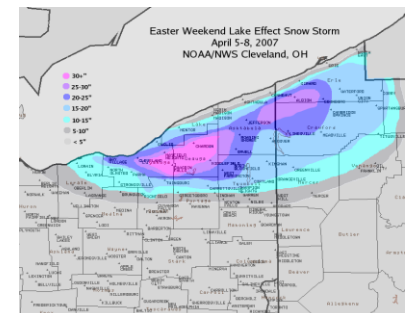
Graupel can be seen in lake effect snow showers. The updrafts in lake effect showers are similar to small thunderstorms that produce hail. The difference is the center is a snowflake and the outer portion is made up of frozen droplets.



Lake Effect is not exclusive to the Great Lakes. The phenomenon occurs in a few other locations around North America and the world.



The image to the left shows intense lake effect snow bands over northeast Ohio. The snow bands that develop in this orientation are a result of air originating from Lake Superior. The moist air passes over Lakes Huron and Erie increasing the moisture content. The image to the right shows a typical dispersion of lake effect snow over Ohio and Pennsylvania.



			1 65 1970 7 1929 sr-734am ss-458pm	2 70 1982 -5 1976 sr-735am ss-457pm	3 77 1982 -7 1976 sr-736am ss-457pm	4 70 1982 3 2002 sr-737am ss-457pm
5 71 2001 2 1871 sr-738am ss-457pm  New Moon	6 70 1998 7 2005 sr-738am ss-457pm	7 67 1998 -5 1882 sr-739am ss-457pm	8 67 1966 -9 1882 sr-740am ss-457pm	9 62 1952 -5 1917 sr-741am ss-457pm	10 69 1971 -5 1958 sr-742am ss-457pm	11 64 1931 -2 1977 sr-743am ss-457pm
12 63 1949 -1 1962 sr-744am ss-457pm	13 65 1901 -3 1962 sr-744am ss-457pm  1 st Quarter	14 64 1901 0 1914 sr-745am ss-457pm	15 67 1971 -1 1958 sr-746am ss-458pm	16 64 1984 -9 1951 sr-747am ss-458pm	17 61 1984 -7 1989 sr-747am ss-458pm	18 62 1939 -5 1989 sr-748am ss-459pm
19 61 1939 -5 1884 sr-749am ss-459pm	20 62 1895 -4 1963 sr-749am ss-500pm	21 65 1967 -7 1872 sr-750am ss-500pm Winter Begins 638 PM  Full Moon	22 64 1949 -15 1989 sr-750am ss-500pm	23 61 1933 -7 1960 sr-751am ss-501pm	24 65 1964 -10 1983 sr-751am ss-502pm	25 66 1982 -10 1983 sr-751am ss-502pm Christmas Day
26 64 1875 -8 1983 sr-752am ss-503pm	27 65 2008 -5 1944 sr-752am ss-504pm  Last Quarter	28 68 1982 -3 1880 sr-752am ss-504pm	29 66 1889 -12 1880 sr-753am ss-505pm	30 63 1971 -12 1880 sr-753am ss-506pm	31 68 1875 -11 1976 sr-753am ss-507pm	NOAA WEATHER RADIO CAN BE FOUND AT THE FOLLOWING FREQUENCIES: Cleveland 162.550 Grafton 162.500 Akron 162.400

Prepare a Home Severe Weather Plan—

- Pick a place where family members could gather if a tornado is headed your way. It could be your basement or, if there is no basement, a center hallway, bathroom, or closet on the lowest floor. Keep this place uncluttered.
- If you are in a high-rise building, you may not have enough time to go to the lowest floor. Pick a place in a hallway in the center of the building.

Assemble a Disaster Supplies Kit containing—

- First aid kit and essential medications.
- Canned food and can opener.
- At least three gallons of water per person.
- Protective clothing, bedding, or sleeping bags.
- Battery-powered radio, flashlight, NOAA Weather Radio All Hazards, and extra batteries.
- Special items for infant, elderly, or disabled family members.

When a Severe Thunderstorm or Tornado WATCH is issued—

- Listen to local radio and TV stations for further updates.
- Be alert to changing weather conditions.

When a Severe Thunderstorm or Tornado WARNING is issued—

- If you are inside, go to the safe place you picked to protect yourself from glass and other flying objects.
- If you are outside, hurry to the basement of a nearby sturdy building or lie flat in a ditch or low-lying area.
- If you are in a car or mobile home, get out immediately and head for safety (as above).

After the Severe Thunderstorm or Tornado passes—

- Watch out for fallen power lines and stay out of the damaged area.
- Listen to the radio for information and instructions.
- Use a flashlight to inspect your home for damage.

Conduct periodic Severe Weather drills so everyone remembers what to do. Stay tuned for warnings—

- *Listen to your NOAA Weather Radio All Hazards, local radio and TV stations for updated storm information.*
- *Severe Thunderstorm and Tornado WATCHES and WARNINGS are issued by county.*
- *Know what a Severe Thunderstorm or Tornado WATCH and WARNING means:*
 - *A Tornado/Severe Thunderstorm WATCH means a Tornado/Severe Thunderstorm is possible in your area.*
 - *A Tornado/Severe Thunderstorm WARNING means a Tornado/Severe Thunderstorm has been sighted and may be headed for your area. Go to a safe location immediately.*